

CLAIMS

The invention claimed is:

1. A cleaning device comprising:

a body defining a cavity having a longitudinal axis A and an opening sized and shaped to accept at least one foot, said cavity adapted to contain a quantity of liquid;

a grate disposed within said cavity and adapted to be disposed beneath a top surface of said liquid, said grate including a plurality of open regions;

at least one cleaning apparatus disposed within said cavity beneath said grate such that at least a portion of said cleaning apparatus is disposed above said grate through said plurality of open regions; and

a motor operatively connected to said at least one cleaning apparatus such that said at least one cleaning apparatus is movable along said longitudinal axis A.

2. The cleaning device as claimed in claim 1 wherein said grate is movably disposed within cavity such that in a first position, said grate is disposed above said top surface of said liquid proximate said opening in a first position, and in a second position, said grate is disposed beneath said top surface of said liquid.

3. The cleaning device as claimed in claim 2 further including a biasing device urging said grate in said first position,

whereby said grate moves from said first position to said second position when a substantially downward force is applied against said grate.

4. The cleaning device as claimed in claim 3 further including a locking device to secure said grate in at least said first position when a substantially downward force is applied against said grate.

5. The cleaning device as claimed in claim 3 further including a sensor which monitors said position of grate, wherein said sensor activates said motor when said grate is in said second position.

6. The cleaning device as claimed in claim 1 wherein said at least one cleaning apparatus includes a brush.

7. The cleaning device as claimed in claim 1 wherein said at least one cleaning apparatus includes a pad.

8. The cleaning device as claimed in claim 1 wherein said at least one cleaning apparatus includes a plurality of cleaning apparatuses, wherein said plurality of cleaning apparatuses are secured to a movable frame.

9. The cleaning device as claimed in claim 8 wherein said frame is operatively connected to said motor via linkage.

10. The cleaning device as claimed in claim 8 wherein said motor is rotatably connected to a cam, wherein said cam is operatively connected to said frame with a linkage, wherein said motor rotates said cam thereby moving said linkage and said frame substantially along said longitudinal axis A.

11. The cleaning device as claimed in claim 8 wherein said frame includes at least one wheel.

12. The cleaning device as claimed in claim 8 wherein said frame and at least one inner edge of said cavity includes a groove and a tab, wherein said groove and said tab guide said frame along said longitudinal axis A.

13. The cleaning device as claimed in claim 1 wherein said at least one cleaning apparatus rotates about an axis B substantially perpendicular to, and in substantially the same plane as, said longitudinal axis A.

14. The cleaning device as claimed in claim 13 wherein said at least one cleaning apparatus includes a plurality of cleaning apparatuses, wherein said plurality of cleaning apparatuses are secured to a movable frame.

15. The cleaning device as claimed in claim 14 wherein said motor is rotatably connected to a cam, wherein said cam is operatively connected to said frame with a linkage, wherein said motor rotates said cam thereby moving said linkage and said frame substantially along said longitudinal axis A.

16. The cleaning device as claimed in claim 15 wherein an inner edge of said cavity includes a toothed portion and wherein said plurality of cleaning apparatuses includes a toothed gear rotatably, wherein as said frame is moved substantially along said longitudinal axis A, said toothed gear engages said toothed portion of said inner edge of said cavity thereby rotating said plurality of cleaning apparatuses about said axis B.

17. The cleaning device as claimed in claim 13 wherein said at least one cleaning apparatus includes a plurality of cleaning apparatuses having a first toothed rod connected at a first end, and wherein an inner surface of said cavity includes a second toothed rod rotatably connected to said motor and which engages said first toothed rod such that as said motor rotates said second toothed rod, said plurality of cleaning apparatuses move substantially along said axis A and rotate about said axis B.

18. A cleaning device comprising:

a body defining a cavity having a longitudinal axis A and an opening sized and shaped to accept at least one foot;

a grate disposed within said cavity, said grate including a plurality of open regions; and

a plurality of cleaning apparatuses disposed within said cavity beneath said grate such that an upper portion of said cleaning apparatuses is disposed above said grate through said plurality of open regions, wherein said plurality of cleaning apparatuses move both along said longitudinal axis A and rotate about a direction substantially perpendicular to, and in the same plane as, said longitudinal axis A.

19. A method of cleaning a foot comprising:

placing a foot on a grate having a plurality of openings disposed therethrough, said grate disposed within a cavity of a basin;

arranging at least one cleaning apparatus substantially beneath said grate within said cavity such that at least an upper portion of said at least one cleaning apparatus is disposed through said plurality of openings within said grate; and

moving said at least one cleaning apparatus substantially along a longitudinal axis of said cavity, wherein said upper portion of said at least one cleaning apparatus disposed above said grate contacts said foot.

20. The method as claimed in claim 19 wherein further comprising rotating said at least one cleaning apparatus about an axis substantially perpendicular to said longitudinal axis A.